

an opening in said mating surface of said housing for receiving said mating portion of said electrical component, said opening having an elongated centerline;

a plurality of transversely extending terminal receiving cavities in said housing, each cavity extending to both sides of said opening; and

a plurality of conductive terminals mounted in said cavities, said terminals including first and second groups of terminals, one of said groups being signal terminals for conducting signals between said contacts of said electrical component and said contact regions of said circuit board, the other of said groups being reference terminals for making ground and power connections between others of said contacts and said contact regions;

said terminals being generally planar and including spring arms extending into said opening for contacting said contacts of said electrical component when inserted therein and board contacts extending from said housing for contacting said contact regions of said circuit board;

said board contacts for all of the signal and reference terminals mounted in said housing cavities being generally arrayed solely in four lines parallel to said centerline, said four lines including an inner line and an outer line on each side of said centerline;

wherein two of said board contacts extend from each cavity;

wherein both of said board contacts extending from each cavity are from the same group of terminals, said inner lines include only board contacts of said first group of terminals and said outer lines include only board contacts of said second group of terminals.

25. (Newly Added) A connector as claimed in claim 24 wherein said first group of terminals are said reference terminals and said second group of terminals are said signal terminals.

26. (Newly Added) A connector as claimed in claim 25 wherein each cavity containing at least one of said signal terminals is adjacent to a cavity containing at least one of said reference terminals.

27. (Newly Added) A connector as claimed in claim 26 wherein each cavity containing at least one of said signal terminals is between two cavities containing at least one of said reference

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terminals.

28. (Newly Added) A connector as claimed in claim 24 wherein said terminals are flat, planar stamped plates of metal.

29. (Newly Added) A connector as claimed in claim 28 wherein said board contacts are solder tails.

30. (Newly Added) A connector as claimed in claim 24 wherein each said signal terminal includes one of said spring arms and one of said board contacts, and two of said signal terminals are mounted in each cavity with one of said signal terminals on each side of said opening.

31. (Newly Added) A connector as claimed in claim 24 wherein each said reference terminal includes two of said spring arms and two of said board contacts, and said reference terminals are mounted one to a cavity with said spring arms and board contacts on opposite sides of said opening.

32. (Newly Added) A connector comprising:
an elongated insulative housing including an opening having a longitudinal axis;
a plurality of terminal receiving cavities extending perpendicularly to said opening and extending to both sides of said opening;
a plurality of terminals mounted in said cavities, said terminals including a plurality of identical terminal sets mounted in parallel face-to-face relation in adjacent ones of said terminal receiving cavities;
each of said terminal sets including a reference terminal in one cavity extending to both sides of said opening and a pair of identical signal terminals in said adjacent cavity;
said signal terminals being oppositely oriented and being disposed on opposite sides of said opening; and
said reference terminal having a generally planar, plate-like body including a pair of

flexible spring arms extending upwardly from said body and a pair of board contacts
extending downwardly from said body, the plane of said body being generally perpendicular
to said longitudinal axis of said opening.

33. (Newly Added) The connector of claim 32 wherein said signal terminals have a generally planar, plate-like body and a single flexible spring arm extending upwardly from said body and a single board contact extending downwardly from said body, said body being generally perpendicular to said longitudinal axis of said opening.

34. (Newly Added) A card edge connector for interconnecting a printed circuit board having conductive contact regions and a removable printed circuit card having a mating edge with a plurality of conductive contact pads, said card edge connector comprising:
an elongated housing formed of insulating material and having a mating surface;
an elongated slot in said mating surface of said housing for receiving said mating edge of said circuit card, said slot having an elongated centerline;
a plurality of transversely extending terminal receiving cavities in said housing, each cavity extending to both sides of said slot; and
a plurality of conductive first and second terminals mounted in said cavities, said first and second terminals being differently configured, said terminals including spring arms with contact portions extending into said slot for contacting said contact pads of said circuit card when inserted therein and board contacts extending from said housing for contacting said contact regions of said circuit board, said contact portions of one of said first and second terminals being closer to said mating surface than said contact portions of the other of said first and second terminals, said first terminals being generally planar;
said board contacts for all of the first and second terminals mounted in said housing cavities being arrayed solely in four lines parallel to said centerline, said four lines including an inner line and an outer line on each side of said centerline;
wherein two of said board contacts extend from each cavity;
wherein said board contacts of said first terminals lie only in said inner lines and said board contacts of said second terminals lie only in said outer lines.

35. (Newly Added) A card edge connector as claimed in claim 34 wherein said first terminals are reference terminals and said second terminals are signal terminals.

36. (Newly Added) A card edge connector as claimed in claim 35 wherein each cavity containing at least one of said signal terminals is adjacent to a cavity containing at least one of said reference terminals.

37. (Newly Added) A card edge connector as claimed in claim 36 wherein each cavity containing at least one of said signal terminals is between two cavities containing at least one of said reference terminals.

38. (Newly Added) A card edge connector as claimed in claim 34 wherein said terminals are flat, planar stamped plates of metal.

39. (Newly Added) A card edge connector as claimed in claim 38 wherein said board contacts are solder tails.

40. (Newly Added) A card edge connector as claimed in claim 34 wherein each said signal terminal includes one of said spring arms and one of said board contacts, and two of said signal terminals are mounted in each cavity with one of said signal terminals on each side of said slot.

41. (Newly Added) A card edge connector as claimed in claim 34 wherein each said reference terminal includes two of said spring arms and two of said board contacts, and said reference terminals are mounted one to a cavity with said spring arms and board contacts on opposite sides of said slot.

42. (Newly Added) A connector for interconnecting a printed circuit board having conductive contact regions and a removable electrical component having a mating portion with a plurality of conductive contacts, said connector comprising:

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an elongated housing formed of insulating material and having a mating surface;
an elongated opening in said mating surface of said housing for receiving said mating
portion of said electrical component, said opening having an elongated centerline;
a plurality of transversely extending terminal receiving cavities in said housing, each
cavity extending to both sides of said opening; and
a plurality of conductive first and second terminals mounted in said cavities, said first
and second terminals being differently configured, said terminals including spring arms with
contact portions extending into said opening for contacting said contacts of said electrical
component when inserted therein and board contacts extending from said housing for
contacting said contact regions of said circuit board, said contact portions of one of said first
and second terminals being closer to said mating surface than said contact portions of the
other of said first and second terminals, said first terminals being generally planar;
said board contacts for all of the first and second terminals mounted in said housing
cavities being arrayed solely in four lines parallel to said centerline, said four lines including
an inner line and an outer line on each side of said centerline;
wherein two of said board contacts extend from each cavity;
wherein said board contacts of said first terminals lie only in said inner lines and said
board contacts of said second terminals lie only in said outer lines.

43. A connector as claimed in claim 42 wherein said first terminals are reference terminals and said second terminals are signal terminals.
44. A connector as claimed in claim 43 wherein each cavity containing at least one of said signal terminals is adjacent to a cavity containing at least one of said reference terminals.
45. A connector as claimed in claim 44 wherein each cavity containing at least one of said signal terminals is between two cavities containing at least one of said reference terminals.
46. A connector as claimed in claim 42 wherein said terminals are flat, planar stamped plates of metal.